U.S. Department
of Transportation

**Pipeline and
Hazardous
Materials Safety
Administration**

400 Seventh Street, S.W.
Washington, D.C. 20590

AUG 16 2005

DOT-E 14186

EXPIRATION DATE: July 31, 2007

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: Dow Chemical Company
Midland, MI

2. PURPOSE AND LIMITATION:

a. This exemption authorizes the transportation in commerce of DOT specification 105J300W tank cars having a maximum gross weight on rail at 286,000 pounds for the transportation of certain hazardous materials. This exemption provides no relief from the Hazardous Materials Regulations (HMR) other than as specifically provided herein.

b. The safety analyses performed in development of this exemption only considered the hazards and risks associated with transportation in commerce.

3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.

4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 172.203(a) in that marking the exemption number on the shipping paper is waived; and §§ 173.26 and 179.13 in that the authorized maximum gross weight on rail is 286,000 pounds.

5. BASIS: This exemption is based on the application of Dow Chemical Company dated April 2, 2005, submitted in accordance with § 107.105, and the public proceeding thereon.

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6. HAZARDOUS MATERIALS (49 CFR 172.101):

Proper Shipping Name	Hazard Class	ID Number	PG
Dimethyl Ether	2.1	UN 1033	N/A
Ethyl Chloride	2.1	UN 1037	N/A
Methyl Chloride	2.1	UN 1063	N/A
Vinyl Chloride, stabilized	2.1	UN 1086	N/A
Vinyl Methyl Ether, stabilized	2.1	UN 1087	N/A
Allyl Chloride	3	UN 1100	I
1,2-Butylene Oxide, stabilized	3	UN 3022	II
2-Chloropropene	3	UN 2456	I
Diethyl Ether	3	UN 1155	I
Flammable liquids n.o.s.	3	UN 1993	I II III
Flammable liquids, toxic, n.o.s	3	UN 1992	I II
Propylene Oxide	3	UN 1280	I
Vinylidene Chloride, stabilized	3	UN 1303	I
Epichlorohydrin	6.1	UN 2023	II
Pesticides, liquid, toxic, flammable, n.o.s	6.1	UN 2903	II
4-Thiapentanal	6.1	UN 2785	III
Toxic, liquids, organic, n.o.s.	6.1	UN 2810	II III
Sulphuric Acid, spent	8	UN 1832	II

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7. SAFETY CONTROL MEASURES:

b. PACKAGING:

i. Packaging prescribed are specification DOT 105J tank cars having a tank test pressure of 300 psig.

ii. Each tank car must conform with the Association of American Railroad's Manual of Standards and Recommended Practices, Manual C-II, Specification S-286, and Manual C-III, Section 2.5., and the following additional requirements:

- Puncture Resistance: Tank heads and shell manufactured from AAR TC128 Gr. B, normalized at thicknesses determined by 49 CFR 179.100-6 for a tank test pressure of 300 psig, plus 0.010 for plate tolerance.

- Head Protection: 49 CFR 179.16 and the Association of American Railroad's Manual of Standards and Recommended Practices, Manual C-III, Section 2.5.

- Controlling Longitudinal Loadings: AAR 901-E draft gears to attenuate the rail yard and in-train compressive and axial forces on the tank car structure.

- Structural worthiness: Stub-sill designed and built to a million mile fatigue life, calculated by applying an overall load factor of 1.09 to those designs approved for gross rail loads at 263,000 pounds.

- Trackworthiness: Trucks are variable-dampened type: Barber S-2-E, or alternative S-2-HD or ASF Motion Control, to improve ride quality and overall truck performance.

- Pressure Relief Device: Re-closing pressure relief device designed and tested in accordance with 49 CFR 179.15.

- Service Equipment Protection: Top fitting protection designed to 49 CFR 179.100-12.

iii. Each tank car may be loaded to a maximum gross weight on rail of 286,000 pounds, provided that the tank is not loaded in excess of the amount authorized per § 173.24b.

c. MARKING: - Each tank car operating under the terms of this exemption must be marked "DOT-E 14186" in four-inch letters and numerals on a contrasting background above the DOT Specification number.

8. SPECIAL PROVISIONS:

a. A person who is not the holder of this exemption who receives a package covered by this exemption may reoffer it for transportation provided no modifications or changes are made to the package and it is reoffed for transportation in conformance with this exemption and the HMR.

b. A current copy of this exemption must be maintained by Dow Chemical Company and made available to interested parties.

c. Each tank car must meet the Association of American Railroads, Manual of Standards and Recommended Practices, Manual C-II, Specification S-286, effective January 1, 2004. The AAR or an individual rail carrier may impose more stringent operating and design requirements. The applicant and the railroads must ensure that transit routes are capable of supporting 286,000 gross rail loads.

d. The additional information requirement for shipping papers in § 172.203(a) is waived.

e. Prior to the initial loading of any tank car described in this exemption, Dow Chemical Canada will provide the Federal Railroad Administration with a copy of the certificate of construction and the reporting mark and number for each car used under the terms of this exemption.

f. The applicant shall make available its complete maintenance and qualification program to the Federal Railroad Administration upon request (see the Association of American Railroads' Manual of Standards and Recommended Practices, Manual C-111, Recommended Practice RP-263). The maintenance program must incorporate any

additional structurally significant components that may be adversely affected by the increase rail load to ensure the continual fitness-for-service of the component based on the inspection method or the inspection interval specified in the maintenance program.

9. MODES OF TRANSPORTATION AUTHORIZED: Rail freight.

10. MODAL REQUIREMENTS: The applicant must notify the Federal Railroad Administration if any unusual incident occurs during the movement by contacting:

Federal Railroad Administration
Hazardous Materials Division
RRS-12, Mail Stop 25
1120 Vermont Avenue, N.W.
Washington, D.C. 20590
(202) 493-6229 or 493-6247

11. COMPLIANCE: Failure by a person to comply with any of the following may result in suspension or revocation of this exemption and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 et seq:

- All terms and conditions prescribed in this exemption and the Hazardous Materials Regulations 49 CFR Parts 171-180.

- Persons operating under the terms of this exemption must comply with the security plan requirement in Subpart I of Part 172 of the HMR, when applicable.

- Registration required by §107.601 et seq., when applicable.

Each "hazmat employee," as defined in §171.8, who performs a function subject to this exemption must receive training on the requirements and conditions of this exemption in addition to the training required by §§172.700 through 172.704.

No person may use or apply this exemption, including display of its number, when the exemption has expired or is otherwise no longer in effect.

12. REPORTING REQUIREMENTS: Shipments or operations conducted under this exemption are subject to the Hazardous Materials Incident Reporting requirements specified in 49 CFR §§ 171.15 - Immediate notice of certain hazardous materials incidents, and 171.16 - Detailed hazardous materials incident reports. In addition, the grantee(s) of this exemption must notify the Associate Administrator for Hazardous Materials Safety -- OHMEA, in writing, of any incident involving a package, shipment or operation conducted under terms of this exemption.

Issued in Washington, D.C.:

for Robert A. McGuire
Associate Administrator for
Hazardous Materials Safety

AUG 16 2005
(DATE)

Address all inquires to: Associate Administrator for Hazardous Materials Safety, Pipeline and Hazardous Materials Safety Administration, Department of Transportation, Washington, D.C. 20590 Attention: PHH-31.

Copies of this exemption may be obtained by accessing the Hazardous Materials Safety Homepage at http://hazmat.dot.gov/exemptions Photo reproductions and legible reductions of this exemption are permitted. Any alteration of the exemption is prohibited.

PO: LaValle